## In the Specification:

Please amend the paragraph beginning on page3, line 8 as follows:

A number of preferred embodiments of the present invention will now be described with reference to Fig. 1, in which is a flow diagram of a method of determining whether an algebraic expression is syntactically correct. Fig. 2 is a flow diagram describing a step of Fig. 1 in which a character string is created from an algebraic expression being analyzed.

Please amend the paragraphs beginning on page 5, line 4 and ending on page 6, line3 as follows:

In step 30, the character string strg is created from the algebraic expression being analyzed. Thus for a given character string, the derived character string strg obtained by step 30 will be a sequence of delimiter characters and type characters. Step 30 is performed by the following [[sub]]steps 31-38 in the flow diagram of FIG. 2.:

In [[sub]]step 31 (not shown), it is determined whether the given algebraic expression begins with a unitary + or – operator. If this is so, then the expression is modified in step 32 by being prefixed with the numeral 0. Alternatively, the algebraic expression may be enclosed in brackets in step 32. Furthermore, all blank (or space) characters are removed from the algebraic expression in step 32. A counter variable i is initiated to 0 in step 33.

In [[sub]]step [[32]] 34 (not shown), the expression is scanned from left to right, character by character, until a delimiter character is found or the end of the expression is reached.

09/727,846

A variable delimiter character  $\alpha$  is set equal to the delimiter character found.

- (a) If  $\underline{\text{in step } 35}$  no characters are found before the delimiter character  $\alpha$ , then  $\underline{\text{in step}}$   $\underline{37}$  the i-th character in the character string strg is set equal to the delimiter character as follows: strg[i] =  $\alpha$ . The Also in step 37, the counter variable i is also incremented by 1 and the procedure continues to [[sub]]step  $\underline{33}$  (not shown)38.
- (b) If <u>in step 35</u> one or more characters are found before the delimiter then it is determined <u>in step 36</u> whether it/they form(s) a valid variable name, function name or number. If the character(s) is/are valid, then a character "v" is put into string position strg[i].

  Alternatively a character "?' is put into string position strg[i]. The following string position in the string strg[] is filled with the delimiter character α as follows: strg[i+1] = α. The counter variable i is increased by 2 and the procedure continues to [[sub]]step [[33]] 38.

Substep 33 Step 38 determines whether the end of the expression has been reached. If this is so, then the procedure ends. If this is not so, then the procedure continues to [[sub]]step [[32]] 34, assuming that the expression now begins at the character immediately following the delimiter character a.

Please amend the paragraph beginning on page 8, line 11 as follows:

Source or psuedo-code for performing steps 50 to 90 of the method 100 is as follows:

```
// strg[] is the character array derived from the given expression
// using [[sub]]steps 31-[[33]]<u>38</u> described above.
// size is the size of the string strg.
// n is the dimension of FromStrg[] and ToStrg[] arrays.
// ChangeSubstrg() replaces FromStrg[i], if found in strg with
ToStrg[i].
// cond is a boolean flag which saves the result of the iteration.
// It is TRUE if the strg is syntactically correct, else FALSE.
size = strlen(strg) + 1;
cond = TRUE;
while (cond) {
  if (strchr(strg,(int)'?')break;
  i = -1
  while (++i < n) {
     while (strstr(strg, FromStrg[i]))
     ChangeSubstrg(strg, FromStrg[i], ToStrg[i]);
09/727,846
                                 5
```

```
j = strlen(strg) + 1;

if (size == j) break;

size = j;

}

if (strcmp(strg, "v") != 0) cond = FALSE;

if (cond) Msg("Expression is correct");

else Msg("Expression is incorrect");
```